REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following remarks is respectfully requested.

Claims 1-22 are active in this application; Claims 1, 3, 6, 8, 11, 15 and 19 having been amended by the present Amendment.

In the outstanding Office Action Claims 1-4, 6-9 11-13 and 15-17 were rejected under 35 USC §103(a) as being unpatentable over Murthy et al (US 6,235,568 B1); Claims 5, 10, 14, and 18 were rejected under 35 USC §103(a) as being unpatentable over Murthy et al, as applied to Claims 1-4, 6-9, 11-13 and 15-17, and further in view of Tanaka et al (US 6,790,723 B2); Claims 19-21 were rejected under 35 USC §103(a) as being unpatentable over Murthy et al in view of Yu (US 6,372,585 B1); and Claim 22 was rejected under 35 USC §103(a) as being unpatentable over Murthy et al in view of Yu, as applied to Claims 19-21 and further in view of Tanaka et al.

In light of the several grounds for rejection, Claims 1, 3, 6, 8, 11, 15 and 19 have been amended to clarify the claimed invention and thereby more clearly patentably define over the cited art. To that end, the pending claims have been amended to clarify that the p-type impurity is doped in the NiSi film, and the p-type impurity profile has a peak concentration in the NiSi film (16), as shown in FIG. 2 and as described at page 9, lines 27 of the specification. No new matter has been added.

By virtue of the claimed invention, the surface state of the NiSi film (16) can be improved, and it becomes difficult to etch the NiSi film (16) when the inter-level insulating film 22 is etched and separation of the silicon nitride film (21) used as a contact liner film on the NiSi film 16 can be suppressed.[1] Furthermore, the n-type impurity concentration in the n^+-type diffusion region 14 lying under the NiSi film 16 can be kept sufficiently high and t he

[1] Specification, page 9, line 27 to page 10, line 18.

resistance of the interface between the NiSi film 16 and the n^+-type diffusion region 14 can be lowered, whereby a rise in the parasitic resistances of the source and drain regions can be prevented.[2]

In contrast, Murthy et al. discloses a semiconductor device wherein the metal film 238 is formed as shown in FIG. 2j after silicon or silicon alloy film 236 is formed as shown in FIG. 2i. Following this, a rapid thermal process or anneal is executed so that silicide region 240 is formed as shown in FIG. 2k. When silicon or silicon alloy film 236 is formed, a p-type dopant (boron) doped therein is diffused into metal film 238. The p-type dopant has a peak concentration in silicon or silicon alloy film 236, not in silicide region 240. Therefore, it is respectfully submitted that Murthy et al. clearly does not anticipate amended claims, nor does the Murthy et al. device enjoy such advantages above discussed as described in the Applicants' specification. Accordingly, the outstanding grounds for rejection based on the Murthy et al. reference are believed to have been overcome.

It is respectfully submitted that the deficiencies of Murthy et al. are not remedied by the secondary references and therefore, it is respectfully submitted that the amended claims patentably define over the cited prior art and are in condition for allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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[2] Id., page 10, line 19 to page 11, line 4.